

## Description

### RESULT EXPECTATION GAME SERVICE METHOD UTILIZING COMMUNICATION NETWORK

#### Technical Field

- [1] The present invention relates, in general, to a method for a result prediction game service utilizing a communication network, and, more particularly, to a result prediction game that is configured to allow the result of a certain event that results in one of at least two results to be predicted.

#### Background Art

- [2] As a representative example of a result expectation game, a betting game can be cited. A betting game is a game which is played ancillary to a main game, for example, a horse race, and in which viewers predict the results of a horse race and make bets, and payouts are granted to customers that successfully predicted the actual result of the horse race.
- [3] Such a betting game may be played utilizing a communication network with the help of the development of mobile communication or the wired or wireless Internet. As a representative example, the technology of Korean Unexamined Pat. Pub. No. 2001-0088616 (title of invention: communication network Go system capable of supporting real-time betting; hereinafter referred to as a cited technology) may be taken. The cited technology discloses a technology that allows general visitors to a Go website to access a Go game relay room and make bets using cyber money, and that, after the termination of a game of Go, assesses a return rate using a betting information storage DataBase (DB) to which betting information is input, and allows payouts, which are calculated based on the assessed return rate, to accumulate in the form of cyber money.
- [4] In the cited technology or a betting game played ancillary to an off-line horse race, a return rate is assessed after all the bets have been summed up. A method is utilized in which, based on the result of the main game, payouts are granted to customers according to the assessed return rate.
- [5] Meanwhile, since such payouts are calculated after the completion of betting in such a way as to sum up the bets of all customers, determine a return rate and calculate the payouts based on the return rate, the return rate and the payouts based on the return rate are determined regardless of any specific customer's intention. As a result, a customer can be made aware of the size of his or her potential payout corresponding to his or her bet after all the customers have bet, so that the customer cannot be made aware of his or her potential payout during betting.

- [6] In such a conventional betting game, a return rate is assessed after the bets of all the customers have been summed up, so that a betting period must be limited in such a way as to allow betting before a main game, from the start of a main game to an early stage of the main game, or the like. The reason for this is because a person who has made a bet at the time at which the result of a main game is about to be known has an advantage over a person who had made an earlier bet. Accordingly, it is essential to limit the betting period. For this reason, the actual period during which a betting game is played must be limited. It is impossible to continue to play the betting game after the limited period. Accordingly, since nothing happens during the period from when the betting ends until the result of the main game is known, interest in the betting game is reduced. Furthermore, the above-described respects are factors that make it difficult to adopt a long-term game, such as a league game, as the main game of the betting game.
- [7] Furthermore, most customers make bets for high payouts. In accordance with a conventional betting game, a return rate and payouts are determined regardless of their intention, so that the probability of obtaining unintended low payouts is increased, thus reducing interest in the betting game.

### **Disclosure of Invention**

#### **Technical Problem**

- [8] Accordingly, the present invention has been made keeping in mind the above problems occurring in the conventional result prediction game, and an object of the present invention is to provide a method for a result prediction game service, which allows customers, who are enjoying a result prediction game, to determine payouts that will be paid later if their predictions are correct, thus allowing a result prediction game to be enjoyed at all times during an event.

#### **Technical Solution**

- [9] A first example of a method for a result prediction game service using a communication network includes an authentication step of authenticating customers who gain access; an application support step of providing support so that customers authenticated at the authentication step can make predictions of the result of a certain event and apply to purchase media, which can each be redeemed for a certain amount when the predictions of the result of the certain event are correct, at amounts determined by the customers; a result receipt step of receiving the result of the certain event; and a payout step of paying an amount, which is determined by subtracting a fee from the certain amount, to each of the customers who correctly predicted the result of the certain event, according to the result received at the result receipt step.
- [10] The method for a result prediction game service further includes a trade establishment step of establishing a trade (trades) of media between a specific customer

and another specific customer (other specific customers) when a plurality of customers applies to purchase the media at the application support step, the specific customer's prediction of the result and the other specific customer's (customers') prediction(s) of the result are different from each other, and a purchase condition set by the specific customer and (a) purchase condition(s) set by the other specific customer(s) fulfill preset conditions.

[11] A concrete example of the trade establishment step is performed in such a way as to establish a trade of media between the specific customer and the other specific customer(s) when a sum of the specific customer's unit purchase price and the other specific customer's (customers') unit purchase price is the certain amount.

[12] If money paid for the payout is cyber money, it is preferred that the fee of the payout step is zero.

[13] A second example of the method for a result prediction game service using a communication network includes an authentication step of authenticating customers who gain access; a betting support step of providing support so that customers authenticated at the authentication step can make predictions of a result of a certain event, determine payouts, which can be received when the predictions of the result of the certain event are correct, and make bets; a result receipt step of receiving the result of the certain event; and a payout step of paying an amount, which is determined by subtracting a fee from the payout, to each of the customers who correctly predicted the result of the certain event, according to the result received at the result receipt step. Similarly, in accordance with this example, the customers can be made aware of payouts, which will be paid to them if their predictions of the result are correct, in advance, and make bets until the result of the event is determined by the termination of the event, so that the customers can continue to enjoy the result prediction game (betting game) while the event is in progress.

[14] The method for a result prediction game service further includes a betting establishment step of establishing a bet (bets) between a specific customer and another specific customer (other specific customers) when a plurality of customers makes bets at the bet support step, the specific customer's prediction of the result and the other specific customer's (customers') prediction(s) of the result are different from each other, and a purchase condition set by the specific customer and (a) purchase condition(s) set by the other specific customer(s) fulfill preset conditions.

[15] A concrete example of the bet establishment step is performed in such a way as to establish the bet(s) between the specific customer and the other specific customer(s) when a sum of the specific customer's betting amount and the other specific customer's (customers') betting amount equals the payout.

[16] A concrete example of the betting support step provides support so that the

customers authenticated at the authentication step determine payouts by predicting the result of the certain event and determining the return rates and the betting amounts. In this case, the betting establishment step establishes bets for betting amounts, which are received at the application receipt step, between which a cross betting relationship is established according to a certain payout rate. A further concrete example in which the customers determine return rates and betting amounts includes a step of providing support so that each of the customers applying to make bets can select at least one from among at least two return rates and input the return rate; and a step of providing support so as to input betting amounts by making bets based on the selected return rate.

- [17] As in the first example, if money paid for the payout is cyber money that is circulated through cyberspace, it is preferred that the fee of the payout step is zero.

### **Advantageous Effects**

- [18] Accordingly, a customer can be previously made aware how much money he or she will be paid if his or her predicted result is correct. In the meantime, in accordance with such a method, customers can be made aware of the progress of an event and determine whether to adjust to or ignore the progress of the event at the time at which a specific customer makes an application for purchase, so that an application for the purchase of media and its associated trade are established immediately before the result of the event is determined and customers can apply to purchase media at any time, thus allowing a result prediction game to be enjoyed immediately before the result of the event is determined. The cases where applications for purchase are made before the result of a certain event is determined and after the result of the certain event has been determined are taken as examples. An application for purchase made before the result of the event becomes apparent has a strong possibility that the trade is established. For applications for purchase made after the result of the event has become apparent, other persons' applications for purchase may be made depending upon which result that a person, who made the application for purchase, predicted when making the application (whether the person, who made the application for purchase, made the application while predicting a unlikely or likely result). That is, if a person who made an application for purchase made the application while predicting a unlikely result, other persons' applications for purchase will flood a system. In contrast, if a person who made an application for purchase made an application for purchase while predicting an unlikely result, there are no other persons' applications, so that trades are not established. That is, in accordance with the present invention, the result prediction game can be freely enjoyed before the result of the event becomes apparent.

### **Brief Description of the Drawings**

- [19] Fig. 1 is a block diagram of a server system that supports an example of the

purchase of media that is an example of a method for a result prediction game service using a communication network according to the present invention;

[20] Fig. 2 is a flowchart showing the example of the purchase of media that is the example of the method for a result prediction game service using a communication network according to the present invention;

[21] Figs. 3 to 13 are reference diagrams that are used to illustrate the flowchart of Fig. 2;

[22] Fig. 14 is a block diagram of a server system that supports an example 1 of betting that is an example of the method for a result prediction game service using a communication network according to the present invention;

[23] Fig. 15 is a flowchart showing the example 1 of betting that is the example of the method for a result prediction game service using a communication network according to the present invention;

[24] Figs. 16 to 24 are reference diagrams that are used to illustrate the flowchart of Fig. 15;

[25] Fig. 25 is a block diagram of a server system that supports an example 2 of betting that is an example of the method for a result prediction game service using a communication network according to the present invention;

[26] Fig. 26 is a flowchart showing the example 2 of betting that is the example of the method for a result prediction game service using a communication network according to the present invention; and

[27] Figs. 27 and 28 are reference diagrams that are used to illustrate the flowchart of Fig. 26.

### **Best Mode for Carrying Out the Invention**

[28] <Example of purchase of media>

[29] A first example according to the present invention can be implemented by the server system that is shown in Fig. 1 and provides a result prediction game service. Such a server system may be achieved by a combination of at least two or more servers.

[30] Referring to Fig. 1, a server system 100 is constructed to include a communication means 11, a storage means 12, an authentication means 13, an application support means 14, a trade establishment means 15, an arithmetic means 16, a result receipt means 17, and a payout means 18.

[31] The communication means 11 allows communication with customers' terminals (a computer, a mobile communication terminal, etc.), which gain access via a communication network, to be performed, thus allowing a result prediction game service to be provided via the communication network.

- [32] The storage means 12 stores information necessary to play the result prediction game, such as customer information, and has at least one DataBase (DB) according to necessity. That is, the DB may include an authentication DB in which customers' authentication information is stored, and a money DB in which information about the amounts of money possessed by the customers is stored. In this case, different types of information may be recorded in the money DB depending on the payment means of the customers. For example, in the case where cyber money or deposited cash is the payment means, information about possessed cyber money or cash is recorded therein. In the case where account transfer or a credit card is used as the payment means, information about a bank account number or credit card number is recorded therein.
- [33] The authentication means 13 authenticates customers based on the information recorded in the authentication DB.
- [34] The application support means 14 supports the customers' purchase of media, and provides support so that customers can determine purchase prices for the media and make applications for the purchases. In this case, the media may be bonds, stocks, or flowers, chips, bears toy or avatars that are set by the server system itself.
- [35] In the present embodiment, for ease of description, the following description is performed on the assumption that the media are bonds.
- [36] The trade establishment means 15 causes trades of bonds to be established between corresponding customers when the customers' purchase conditions correspond to each other because they fulfill preset conditions. For example, when, for bonds that can each be redeemed for 200 won when the result of a certain event that results in one of "a" and "b" was successfully predicted, customer A applies to purchase the bond at 60 won while predicting the result to be "a" and customer B applies to purchase the bond at 140 won while predicting the result to be "b", the trade establishment means 15 allows a trade to be established between the customers A and B.
- [37] The arithmetic means 16 performs necessary arithmetic that may accompany customers' purchase of bonds and the establishment of a trade of bonds between customers.
- [38] The result receipt means 17 receives the result of a certain event. The result receipt means 17 functions to receive the result from an external communication medium, or the result of a game that is played on the server system 100 itself.
- [39] The payout means 18 pays the converted amounts of media to the customers that successfully predicted the result of an event (hereinafter referred to as successful customers).
- [40] A method for a result prediction game service performed in the server system 100 described above is described with reference to Fig. 2, with numbers being assigned for convenience of description.

[41] 1. Authentication <S201>

[42] The authentication means 11 authenticates a customer who gains access. An example of such authentication is the determination of whether there is a match by comparing the Identification (ID) and password of a customer, which are recorded in the authentication DB, with an ID and a password, which are input by the customer through the customer's terminal, as is well known.

[43] 2. Application support <S202>

[44] The application support means 14 provides support so that customers can predict the result of a game that is provided by the current server system 100 itself or is separately performed off-line, can freely set prices on a bond that is worth a specific amount of money when the prediction of the result of the game is correct, and can make applications for the purchase of the bonds at those prices. An example of such a game is described below with Go being taken as an example.

[45] The screen of Fig. 3 is a screen that is displayed on a customer's terminal, which shows the case where the customer enters a Go game room that is currently open based on a Go service that is provided by the server system 100.

[46] A 'bond purchase' menu 31 is formed in the right middle part of the screen of Fig. 3 so that the customer can predict the result of a game of Go and can make an application for the purchase of the bond.

[47] When the customer clicks on the 'bond purchase' menu 31 after predicting the winner of the currently played game of Go, the pop-up window of Fig. 4 is displayed. The pop-up window of Fig. 4 presents choices so that the customer can select a winner from among current players.

[48] When the customer clicks on a 'confirmation' menu 41 after selecting Se-dol Lee from among both players (Se-dol Lee and Hoon-hyun Jo), the pop-up window of Fig. 5 (hereinafter referred to as the 'Se-dol Lee window') related to the condition that Se-dol Lee wins the game is displayed. The Se-dol Lee window presents bonds whose purchases have been applied for and whose sales have been applied for on the condition that Se-dol Lee wins the game.

[49] In the present invention, it is assumed that a payment for a bond is 200 won. Furthermore, a customer can purchase one or more bonds. Accordingly, when a customer purchases a certain number of bonds each worth a payment of 200 won, the customer will receive a certain amount of money that is determined by subtracting a certain fee (maybe zero) from 200 won ? the number of bonds that the customer have purchased if Se-dol Lee wins the game.

[50] The Se-dol Lee window of Fig. 5 is described in detail. Applications for the purchase of bonds made on the condition that Se-dol Lee wins the game are made at prices ranging from ten won to one hundred won. That is, the purchase of bonds that

are each worth 200 won when Se-dol Lee wins the game has been applied for with the purchase of 520 bonds being applied for at a price of 10 won, that is, a lower limit, ? ? ?, the purchase of 260 bonds being applied for at a price of 80 won, and the purchase of 300 bonds being applied for at a price of 90 won, that is, an upper limit.

[51] The numbers in the purchase column of the Se-dol Lee window represent the numbers of bonds whose purchases have been applied for on the condition that Hoon-hyun Jo wins the game.

[52] Referring to Fig. 6, the window of Fig. 6(a), that is, the Se-dol Lee window of Fig. 5, is displayed on the terminal 200 of the customer who selected Se-dol Lee to win while the window of Fig. 6(b) (hereinafter referred to as a 'Hoon-hyun Jo' window) related to the condition that Hoon-hyun Jo wins the game is displayed on the terminal of the customer who selected Hoon-hyun Jo to win.

[53] As shown in Fig. 6, when the purchase of bonds has been applied for on the condition that Se-dol Lee wins the game, particulars on the purchase of bonds that has been applied for on the condition that Se-dol Lee wins the game are indicated in the purchase column of the Hoon-hyun Jo window.

[54] For example, as shown in Fig. 7, when a customer applies to purchase 10 bonds at a unit price of 90 won on the condition that Se-dol Lee wins the game, the number of bonds is displayed in the blank of the purchase column of the Hoon-hyun Jo window for a price of 110 won (= a payment of 200 won ? a purchase price of 90 won). That is, when a customer applies to purchase bonds at a certain unit price, an application for the purchase of bonds made by the customer is established in the Hoon-hyun Jo window in the form of a sale of bonds at a unit price of 200 won ? the certain unit price. Accordingly, the Se-dol Lee window and the Hoon-hyun Jo window have corresponding details, as shown in Fig. 6.

[55] When a customer who predicts Se-dol Lee's win clicks on the blank of the purchase column of the Se-dol Lee window that corresponds to a certain purchase price at which the customer desires to purchase bonds, a window in which the number of bonds that the customer desires to purchase can be entered is displayed, as shown in Fig. 8. When the customer enters the number of bonds and then clicks on the 'confirmation' menu 81, the customer's application for the purchase of bonds is transmitted to the server system 100 over a communication network and the arithmetic means 16 of the server system 100 performs arithmetic that is necessary to add the details of the new application for the purchase of bonds to existing data based on the new application for the purchase of bonds.

[56] 3. Trade establishment <S203>

[57] When a plurality of customers applies to purchase bonds, the trade establishment means 15 allows a trade to be established between a specific customer and another



customer if the customers' result predictions are different from each other and the specific customer's purchase condition and the other customer's purchase condition fulfill preset conditions.

[58] In greater detail, for example, when a specific customer applies to purchase 100 bonds at a unit price of 90 won in the Se-dol Lee window of Fig. 5 on the condition that Se-dol Lee wins a game, the trade is reserved because there are no bonds whose sale is currently reserved (that is, whose purchase at a unit price of 90 won on the condition that Hoon-hyun Jo wins the game has been reserved). Instead, 100 is added to the number in the blank of the purchase column at a price of 90 won, thus increasing it to 400, as shown in Fig. 9. However, when customer A applies to purchase 100 bonds at a unit price of 110 won on the condition that Se-dol Lee wins the game in the Se-dol Lee window, a trade can be immediately established because the number of bonds whose sale at a unit price of 110 won is currently reserved (that is, the number of bonds whose purchase at a unit price of 90 won is reserved on the condition that Hoon-hyun Jo wins the game) is 200. Accordingly, as the customer A applies to purchase bonds, a trade of bonds is established between the customer A and another customer who applies to purchase 200 bonds at a unit price of 90 won on the condition that Hoon-hyun Jo wins the game. Accordingly, the details of the trade between the customers are described as 100, that is, the number of bonds whose sale is reserved at a unit price of 110 won, as shown in the window of Fig. 10. As a result, the numbers of bonds for purchase and sale do not overlap with each other in the Se-dol Lee window and the Hoon-hyun Jo window. The reason for this is that the details of the trade are removed from the betting window because the trade is established when they overlap.

[59] Furthermore, the number of customers who apply to purchase 200 bonds at a unit price of 90 won on the condition that Hoon-hyun Jo wins the game may be 1 or 2. A trade of some of the bonds may be established. For example, in the case where the customer A applies to purchase 100 bonds at a unit price of 90 won on the condition that Hoon-hyun Jo wins the game and the customer B applies to purchase 100 bonds at a unit price of 90 won on the condition that Hoon-hyun Jo wins the game, the purchase of a total of 200 bonds has been applied for at a unit price of 90 won on the condition that Hoon-hyun Jo wins the game. In this case, when a specific customer applies to purchase 90 bonds at a unit price of 110 won on the condition that Se-dol Lee wins the game, 90, which is the number of bonds whose trade is reserved, is subtracted from 200, and 110 then remain. Methods of selecting a customer to trade with a specific customer are various. As an example, selection is made in such a way as to select one who applies to purchase bonds first from among customers A and B. That is, if the customer A applies to purchase bonds first, the customer A's application for the purchase of 90 bonds, which is part of the customer A's application for the purchase of

100 bonds, is accepted, the customer A's application for the purchase of 10 bonds is reserved, and the customer B's application for the purchase of 100 bonds remains reserved. As described above, one customer may purchase one or more bonds that can each be used to claim a payout of 200 won. In such a case, a trade is preferably established on the basis of the number of bonds whose purchase has been applied for.

[60] As described above, a trade between customers is established when the sum of a unit purchase price at which a specific customer applied to purchase bonds and a unit purchase price at which another customer applies to purchase bonds is equal to a payout that the bonds can each be used to claim.

[61] Meanwhile, the server system itself can perform trades with customers. In this case, the provision of a separate step of establishing a bond trade between customers, that is, the provision of a trade establishment step, is not necessary, so that step S203 can be omitted. The reason for this is that a bond trade with the server system is established immediately after customers apply to purchase bonds.

[62] 4. Result receipt <S204>

[63] The result receipt means 17 receives a result from a side that provides notification of the result.

[64] For example, the result receipt means 17 may receive the result of an off-line game of Go from an administrator in the case where the game of Go is played off-line, receive the result of a game of Go that is detected by the server system 100 itself in the case where the game of Go is played in the server system 100, or receive a result that is automatically transmitted from some other server on the Internet to the server system 100.

[65] 5. Payout <S205>

[66] The payout means 18 pays a certain amount of money, which is determined by subtracting a certain fee from a payment for bonds that were purchased by a winning customer who successfully predicted the result of a game, to the winning customer according to a received result.

[67] The above step is described in greater detail using an example. When a specific customer applied to purchase 50 bonds on the condition that Se-dol Lee wins a game at a unit price of 60 won, another customer applied to purchase 50 bonds at a unit price of 140 won, and, therefore, a trade between the specific customer and another customer is established, the payout means 18 pays a payment, which is determined by subtracting a certain fee from 10000 won, to the specific customer and does not pay a payment to the other customer. When the payment is composed of cyber points, the payment can be completely paid within the server system 100. In contrast, when the payment is cash, the payment may be paid through a well-known Internet cash payment method. In the case where the payment is cyber money, a relevant game is not a gambling game

that is played for cash, but a play that is played for cyber money, so that a fee that is subtracted from a gross payment is preferably set to zero.

[68] Meanwhile, although the present invention employs the method of subtracting a fee at the time of making a payment, the fee may be subtracted at the time of establishing a trade between customers in the server system 100 depending on the application. In this case, the preset conditions for the establishment of trades may vary. Citing a case as a representative example, when customer A applies to purchase bonds at a unit price of 110 won on the condition that Se-dol Lee wins a game, a condition for purchasing bonds at a unit price of 110 won is posted in the sale column of the window of the customer B who predicts Hoon-hyun Jo's win, and a trade between the customers A and B is established when the customer B applies to purchase bonds at a unit price of 110 won. Thereafter, a winning customer receives 200 won, which corresponds to the converted price of a bond. As a result, the server system takes 20 won from the customers A and B at the time of establishing a trade. That is, only when a customer proposes a certain amount of money that is determined by adding a fee to a net payment for a bond, a trade is established between the customers.

[69] In the case where a fee is subtracted at the time of establishing a trade, a fee is preferably set to zero at the time of making a payment.

[70] Meanwhile, Fig. 12 shows an example in which the number of different possible predictions of the results of a game of Go is three or more in the result prediction game service according to the above-described first embodiment.

[71] For example, in the case where a final winner is selected from among a plurality of players as in a Go king cup game, the number of different possible predictions of the results of a game may be three or more. This example is described below.

[72] The example is described on the assumption that Go players who advance to the final competition are Hoon-hyun Jo, Se-dol Lee, Chang-ho Lee and Cheol-hwan Choi.

[73] It is assumed that a bond is worth a payout of 400 won when a successful prediction was made.

[74] In the tables of Fig. 12, details of trades that are reserved are displayed.

[75] In Fig. 12, applications for the purchase of bonds made in a range from 10 to 100 won on the condition that Hoon-hyun Jo wins the game are reserved, applications for the purchase of bonds made in a range from 10 to 90 won on the condition that Se-dol Lee wins the game are reserved, applications for the purchase of bonds made in a range from 10 to 120 won on the condition that Chang-ho Lee wins the game are reserved, and applications for the purchase of bonds made in a range from 10 to 80 won on the condition that Cheol-hwan Choi wins the game are reserved.

[76] Meanwhile, the numbers indicated in the sale columns of a Hoon-hyun Jo window, a Se-dol Lee window, a Chang-ho Lee window and a Cheol-hwan Choi window are

described as follows.

[77] The Hoon-hyun Jo window is described as an example first. 200, which is the number of bonds at the lowest purchase price in the sale column of the Hoon-hyun Jo window, is selected as the smallest number of bonds whose purchase has been applied for on the condition that Se-dol Lee, Chang-ho Lee or Cheol-hwan Choi wins the game, and is displayed. That is, the purchase of bonds at the highest unit price is reserved at a price of 90 won in the Se-dol Lee window, the purchase of bonds at the highest unit price is reserved at a price of 120 won in the Chang-ho Lee window, and the purchase of bonds at the highest unit price is reserved at a price of 80 won in the Cheol-hwan Choi. The sum of the highest purchase prices in the Se-dol Lee window, the Chang-ho Lee window and the Cheol-hwan Choi window is 290 won. Accordingly, when a specific customer applies to purchase bonds at a unit price of 110 won on the condition that Hoon-hyun Jo wins the game, the application for the purchase of bonds at a unit price of 120 won on the condition that Hoon-hyun Jo wins the game is the highest one in the Hoon-hyun Jo window. Since the sum of the highest purchase prices in the Se-dol Lee window, the Chang-ho Lee window and the Cheol-hwan Choi window, and 110 won, at which the specific customer applies to purchase bonds, is 400 won, a trade is established between the customers. That is, when a specific customer applies to purchase bonds at a unit price of 110 won on the condition that Hoon-hyun Jo wins the game, a trade is established simultaneously with the application. How many bonds such a specific customer can purchase is described below. In Fig. 12, the number of bonds at the highest purchase price in the Se-dol Lee window is 200, the number of bonds at the highest purchase price in the Chang-ho Lee window is 400, and the number of bonds at the highest purchase price in the Cheol-hwan Choi window is 370. Accordingly, although the specific customer applies to purchase 500 bonds at a unit price of 110 won on the condition that Hoon-hyun Jo wins the game, the smallest number of bonds at the highest purchase prices in the Se-dol Lee window, the Chang-ho Lee window and the Cheol-hwan Choi window is 200, so that a trade of 200 bonds is immediately established. Details posted in the windows change as shown in the windows of Fig. 13. Referring to Fig. 13, the number of bonds at the highest purchase price in the Hoon-hyun Jo window changes to 300 at a unit price of 110 won, the number of bonds at the highest purchase price in the Se-dol Lee window changes to 120 at a unit price of 80 won, the number of bonds at the highest purchase price in the Chang-ho Lee window changes to 200 at a unit price of 120 won, and the number of bonds at the highest purchase price in the Cheol-hwan Choi window changes to 170 at a unit price of 80 won. As a result, since, in Fig. 13, the sum of the highest purchase prices of the respective windows is 390 won, no further trade is established.

[78] Referring to Fig. 12 again, the number of bonds at the lowest sale price, which is

posted in the sale column of the Hoon-hyun JO window, is posted on the basis of the smallest of the numbers of bonds at the highest purchase prices in the Se-dol Lee window, the Chang-ho Lee window and the Cheol-hwan Choi window.

[79] Furthermore, the number of bonds at the second lowest sale price (120 won) after the lowest sale price (110 won) is posted on the assumption that trades of all the bonds at the lowest sale price (110 won) in the Hoon-hyun Jo window have been established. That is, when trades of all the bonds at the lowest sale price in the Hoon-hyun Jo window of Fig. 12 have been established, 120 in the Se-dol Lee window, which is the smallest of the numbers of bonds at the highest purchase prices in the Se-dol Lee window, the Chang-ho Lee and the Cheol-hwan Lee window, is posted as the number of bonds at the second lowest sale price (110 won) after the lowest sale price (120 won) in Fig. 12. Using the above-described method, the numbers of bonds at sale prices ranging from 130 won to 390 won are determined.

[80] In the same manner, for the Se-dol Lee window, the Chang-ho Lee and the Cheol-hwan Choi window, the numbers of bonds at sale prices are determined and posted.

[81] Meanwhile, in the situation of Fig. 12, when a specific customer applies to purchase bonds at a unit price of 110 won on the condition that Hoon-hyun Jo wins the game, a trade of 200 bonds is immediately established.

[82] For example, when a customer applies to purchase 500 bonds at a unit price of 110 won on the condition that Hoon-hyun Jo wins the game, a trade of 200 bonds is immediately established, and it is indicated in the blank of the sale column of the Hoon-hyun Jo window at a price of 110 won that a trade of 300 bonds has been reserved, as shown in Fig. 13. This new item is reflected in windows related to the condition that Se-dol Lee, Chan-ho Lee or Cheol-hwan Choi win the games, respectively. In the window related to the condition that Se-dol Lee wins the game, the highest purchase price at which a trade of bonds is reserved is posted as 80 won, the lowest sale price at which a trade of bonds may be immediately established is posted as 90 won, and the number of bonds to be sold is posted as 170. In the Chang-ho Lee window, the highest purchase price at which a trade of bonds is reserved is maintained at a price of 120 won, and the number of bonds for which a trade may be immediately established at the lowest unit sale price of 130 won is 120. In the Cheol-hwan Choi window, the highest purchase price at which a trade of bonds is reserved is maintained at a price of 80 won, and the number of bonds for which a trade may be immediately established at the lowest sale price of 90 won changes to 120. Such arithmetic is performed by the arithmetic means in real time.

[83] Thereafter, a winning customer who successfully predicted the result receives a payment that is determined by multiplying the number of bonds, for which a trade of bonds was established, by the converted amount of a single bond, that is, 400 won.

[84] <Example 1 of betting>

[85] The present embodiment relates to a betting game that is an example of the result prediction game in which customers make bets while predicting the result of a certain event and receive payouts previously determined by them when the successful predictions were made.

[86] Of course, the betting game can be implemented using the server system that provides betting games.

[87] Referring to Fig. 16, a server system 1600 is constructed to include a communication means 141, a storage means 142, an authentication means 143, a betting support means 144, a betting establishment means 145, an arithmetic means 146, a result receipt means 147, and a payout means 148.

[88] The communication means 141 enables communication with customers' terminals (a computer, a mobile communication terminal, etc.) that gain access using a communication network, thus allowing a result prediction game service to be provided via the communication network.

[89] The storage means 142 stores information necessary to play the result prediction game, such as customer information.

[90] The authentication means 143 authenticates customers who gain access.

[91] The betting support means 144 provides support so that customers determine payouts and make bets.

[92] The betting establishment means 145 allows customers' bets, which are made between the customers and fulfill preset conditions, to be established.

[93] The arithmetic means 146 performs arithmetic that is necessary when customers apply for bets or bets are established.

[94] The result receipt means 147 receives the result of a certain event.

[95] The payout means 148 pays payouts to customers whose bets are established and who successfully predicted the result of an event.

[96] An embodiment of the method for a result prediction game service using a communication network according to the present invention, which is performed in the above-described server system 1400, is described in detail with reference to the flowchart and reference view of Fig. 15 with a game of Go being taken as an example below.

[97] 1. Authentication <S1501>

[98] The authentication means 143 authenticates a customer who gains access through the customer's terminal.

[99] 2. Application support <S1502>

[100] The betting support means 144 provides support so that authenticated customers can predict the result of a game of Go that is provided by the current server system 1400

itself or is separately performed off-line, and make bets.

[101] An example of such betting support is described with reference to Figs. 16 to 24.

[102] The screen of Fig. 16 shows the case where a customer enters a Go game room that is currently open based on a Go service that is provided by the server system 1400 itself.

[103] A 'betting' menu 161 is formed in the right middle part of the screen of Fig. 16 so that the customer can predict the result of a game of Go and can make a bet.

[104] When the customer clicks on the 'betting' menu 161 after predicting the winner of the currently played game of Go, the pop-up window of Fig. 17 is displayed. The pop-up window of Fig. 17 presents choices so that the customer can select a predicted winner from among current players.

[105] When customer A selects Se-dol Lee from among both players (Se-dol Lee and Hoon-hyun Jo), the betting window of Fig. 18 is displayed. The betting window of Fig. 18 is constructed such that the customer can determine a payout and then make a bet. The present embodiment selects an example in which a customer's payout can be determined according to the number of the customer's bets, from among examples in which customers can determine payouts and then make bets. That is, in the present embodiment, when the customer's prediction is correct, the customer is paid a payout of 200 won per bet, that is, betting point. When the customer makes ten bets, that is, ten betting points, the customer has a right to be paid a payout of 2000 won. In this case, the customer can select a betting amount per bet, that is, betting point. For example, the customer can determine a betting amount per bet, that is, betting point, by entering a betting amount selected from among betting amounts ranging from 10 won to 190 won and the number of bets made for the selected betting amount. In greater detail, when the customer A clicks on a number-of-bets input blank A corresponding to 90 won after determining a betting amount that is 90 won per betting point in the betting window of Fig. 18, a window into which the number of bets is input is displayed as shown in Fig. 19. The customer A can be made aware that a payout to be paid later is 18,000 won by entering 90, that is, the number of bets, in the number-of-bets input blank of the betting window of Fig. 19 and clicking on the 'confirmation' menu 191.

[106] Fig. 20 shows the details of a betting window in the case where a specific customer activates the betting window related to the condition that Se-dol Lee wins the game in the state in which a plurality of customers make bets. In the betting window related to the condition that Se-dol Lee wins the game, bets are currently reserved in a range from 10 to 100 won per betting point.

[107] The number-of-immediately-establishable-bets column of Fig. 20 shows the details of bets that Hoon-hyun Jo will win the game, which are currently reserved.

[108] That is, referring to Fig. 21, it can be understood that the details of a betting window related to the condition that Se-dol Lee wins the game correspond to the details of a betting window related to the condition that Hoon-hyun Jo wins the game. For example, when a certain customer makes 150 bets that Hoon-hyun Jo will win the game at a price of 90 won per betting point, the number of bets, that is, betting points, is entered in the blank of the number-of-immediately-establishable-bets column of the betting window related to the condition that Hoon-hyun Jo wins the game at a betting amount of 110 won. Fig. 22 shows a betting window for Se-dol Lee's win and a betting window for Hoon-hyun Jo's win in the case where a plurality of customers makes bets. As shown in Fig. 22, the number of bets that Hoon-hyun Jo will win the game is entered in the number-of-immediately-establishable-bets column of the betting window for Se-dol Lee's win. In this case, as in the first embodiment, an amount that is determined by subtracting a betting amount per betting point from 200 won, that is, a payout per betting point is displayed in the number-of-immediately-establishable-bets column of the betting window for Se-dol Lee's win.

[109] 3. Betting establishment <S1503>

[110] When a plurality of customers applies to purchase bonds, the bet establishment means 145 allows a trade to be established between a specific customer and another customer if the customers' result predictions are different from each other and the specific customer's purchase condition corresponds to the other customer's purchase condition. This is described in greater detail with reference to Fig. 23 below.

[111] When the customer A makes 100 bets at a betting amount of 200 won that Se-dol Lee wins the game and the customer B makes 90 bets at a betting amount of 110 won per betting point that Hoon-hyun Jo will win the game, the sum of the customer A's betting amount per betting point, that is, 90 won, and the customer B's betting amount per betting point, that is, 110 won, is 200 won. Accordingly, cross bets between the customer A' 90 bets and the customer B' 90 bets are established and the customer A's 10 remaining bets are reserved, as shown in Fig. 24.

[112] That is, bets between customers are established in such a way that bets between a specific customer and another customer are established in the case where the sum of the specific customer's betting amount per betting point and the other customer's betting amount per betting point is a payout of 200 won per betting point.

[113] Furthermore, in the same manner, a customer can make at least one bet, so that the customer's bets are established according to the number of bets.

[114] Meanwhile, in the case where bets are made between the server system and customers, the step of allowing bets to be established between the customers may be omitted. The reason for this is that the establishment of bets with the server system is achieved immediately after customers make the bets.



[115] 4. Result receipt <S1504>

[116] The result receipt means 147 receives a result from a side that provides notification of the result.

[117] 5. Payout <S1505>

[118] The payout means 148 pays an amount, which is determined by subtracting a fee from a gross payout corresponding to the number of bets that were made by a winning customer who successfully predicted the result of the game of Go, to the winning customer according to the received result.

[119] The above-described step is described in greater detail using an example. When a specific customer makes 50 bets on Se-dol Lee's win at a price of 60 won per betting point and the bets are established, the payout means 148 pays an amount, which is determined by subtracting a fee (the fee may be zero) from 10,000 won, to the specific customer when Se-dol Lee wins the game. Of course, if Se-dol Lee is defeated, the specific customer loses the betting amount of 3,000 won that was bet by him or her.

[120] Of course, in this betting game, the fee taken by the server system 1600 may be subtracted at the time of the establishment of bets, which is similar to that of the media intermediation example, so that a description thereof is omitted here.

[121] In the above-described example, an example of the case in which the number of predictions of the result may be three or more is achieved based on a concept identical to that of the description of the first embodiment made in conjunction with Figs. 12 and 13.

[122] <Example 2 of betting>

[123] The present embodiment relates to an example of a betting game in which customers determine a payout by determining a return rate and make bets. This betting game can be implemented using the service system of Fig. 25.

[124] Of course, this betting game can be implemented using the server system that provides betting games.

[125] Referring to Fig. 25, a server system 2500 is constructed to include a communication means 251, a storage means 252, an authentication means 253, a betting support means 254, a betting establishment means 255, an arithmetic means 256, a result receipt means 257, and a payout means 258.

[126] The communication means 251 allows a result prediction game service to be provided via the communication network by enabling communication with customers' terminals that gain access using a communication network.

[127] The storage means 252 stores information necessary to play the result prediction game, such as customer information.

[128] The authentication means 253 authenticates customers who gain access.

[129] The betting support means 255 provides support so that customers determine

payouts and make bets. In greater detail, the betting support means 254 provides support so that customers determine return rates, determine betting amounts based on the return rates, and make bets.

[130] The betting establishment means 255 allows customers' bets, which are made between the customers and fulfill preset conditions, to be established.

[131] The arithmetic means 256 performs arithmetic that is necessary when customers apply for bets or bets are established.

[132] The result receipt means 257 receives the result of a certain event.

[133] The payout means 258 pays payouts to customers whose bets are established and who successfully predicted the result of an event. In more detail, the payout means 258 pays an amount, which is determined by subtracting a fee (of course, the fee may be zero) from a return rate  $\times$  a betting amount determined by a customer, to the customer.

[134] An embodiment of the method for a result prediction game service using a communication network according to the present invention, which is performed in the above-described server system 2500, is described in detail with reference to the flowchart and reference view of Fig. 26 with a game of Go being taken as an example below.

[135] 1. Authentication <S2601>

[136] The authentication means 253 authenticates a customer who gains access.

[137] 2. Betting support <S2602>

[138] Support is provided such that the above authenticated customers can determine return rates and betting amounts and make bets <S2602>.

[139] In greater detail, support is provided such that a customer applying for bets can determine a return rate by selecting one from among a plurality of preset return rates, and input a betting amount by making bets based on the determined return rate.

[140] An example of the above description is described with a betting status board being taken as an example. The betting status board is displayed to provide support so that customers can determine return rates and betting amounts and make bets. For ease of description, the case where a main game is a game of Go is taken as an example.

[141] The betting status board is provided with a betting status table 271 that is provided with a plurality of return rates that can be selected by customers, and a plurality of betting amount input keys 272 that allow the customers to input betting amounts based on the determined return rates after selecting and determining the return rates so as to make bets.

[142] In accordance with the betting status table 271 of Fig. 27, a customer can determine a return rate for 'Se-dol Lee' black side (●) : 'Hoon-hyun Jo' white side (○) by selecting one from among return rates ranging from 10:1 to 1:10. The customer can make bets after analyzing a plurality of preset return rates and the status of a main

game. In FIG. 4, a return rate of 10:1 for black side : white side indicates that a payout of 11 is granted when 10 is bet on the black side's win, and a payout of 11 is granted when 1 is bet on the white side's win. As a simple example thereof, if a customer that predicts a black side's win wants to bet 300 won at a return rate of 3:1 for black side : white side, the customer indicates the black side in a 3:1 return rate blank by manipulating a customer's terminal, as shown in FIG. 28, and makes a bet by clicking on a '100' key 272a, which is one of the betting amount input keys 272, three times.

[143] Of course, there may be various applications related to the determination of the return rate, such as an application that is implemented to provide support so that a customer can determine and input an arbitrary return rate (directly input numerals) and input a betting amount by making a bet based on the determined return rate.

[144] 3. Betting establishment <S2603>

[145] When the customers determine return rates and betting amounts using the betting status board and make bets based on the determined return rates and betting amounts, the betting establishment means 255 establishes bets between the customers if preset conditions are fulfilled.

[146] For example, when customer A bets 10,000 won at a return rate of 10:1 that Se-dol Lee wins the game and customer B bets 10,000 won at a return rate of 1:10 that Hoon-hyun Jo will win the game, bets for 1,000 won of customer A's 10,000 won and customer B's 10,000 won are established and bets for customer B's remaining 9,000 won are reserved.

[147] For reference, in the effective betting column of the betting status table of Fig. 27, betting amounts, bets of which are reserved, are summed up. If there are betting amounts, bets of which are reserved, bets are immediately established.

[148] In the present embodiment, bets can be made between the server system and customers, in which case the present step may be omitted.

[149] 4. Result receipt <S2604>

[150] The result receipt means 257 receives the result of a main game, that is, a game of Go.

[151] 5. Payout <S2605>

[152] The payout means 148 pays amounts, which are determined by subtracting fees from payouts based on selected and determined return rates and betting amounts, to the customers according to the received result of the main game. For example, in the case where the game of Go results in the black side's win, a customer who bet 600 won on the black side's win at a return rate of 3:1 is paid an amount that is determined by subtracting a fee from a payout of 800 won, and a customer who bet 700 won on the white side's win at a return rate of 1:3 loses 700 won.

[153] Of course, in the present embodiment, the fee may be zero.

**Industrial Applicability**

- [154] The present invention can be widely applied to result prediction games in which certain results are predicted, such as a betting game that is played over a communication network.